Showcasing an Innovative Activity

From Scattergories to Categories:
Toward a Common Language for JPL Information

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Inspiration: The Crux of the Issue

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The High Cost of Not Finding Information

An IDC White Paper

Analysts: *Susan Feldman and Chris Sherman*

Information: The Lifeblood of the Enterprise

Timely access to critical information separates the winners from the losers in today's information economy. Yet all too often knowledge workers fail in their quest to obtain the information they need. There are many reasons for this failure — some technical, some cultural, and some personal. No matter the cause, the amount of time wasted in futile searching for vital information is enormous, leading to staggering costs to the enterprise.

❖ Problem remains unsolved– if anything, it's gotten worse

Driving Forces: JPL 2025

"In ten years' time, our physical workplaces may look much the same, but *our ability to access and benefit from information will make us orders of magnitude more powerful and productive*."

From JPL 2025, Thrust 01 | Creating the Workplace of the Future

?

How do we foster an effective information ecosystem?

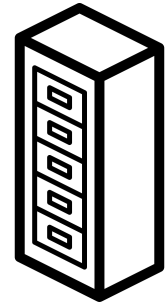**GOAL** | Creating a common language for both JPLers and JPL digital systems, so that information can be reused and aggregated for exponentially more knowledge.

Information Management: Present

Digital system, based on:

❖ Diverse file types

❖ **Multiple (siloed) repositories**

❖ Individual user permissions

❖ (Unified) Search
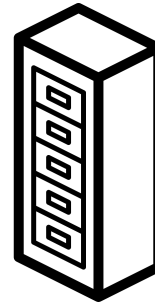
Docushare

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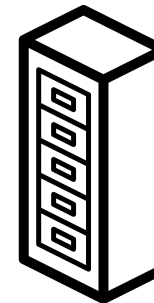
SharePoint

EPDM

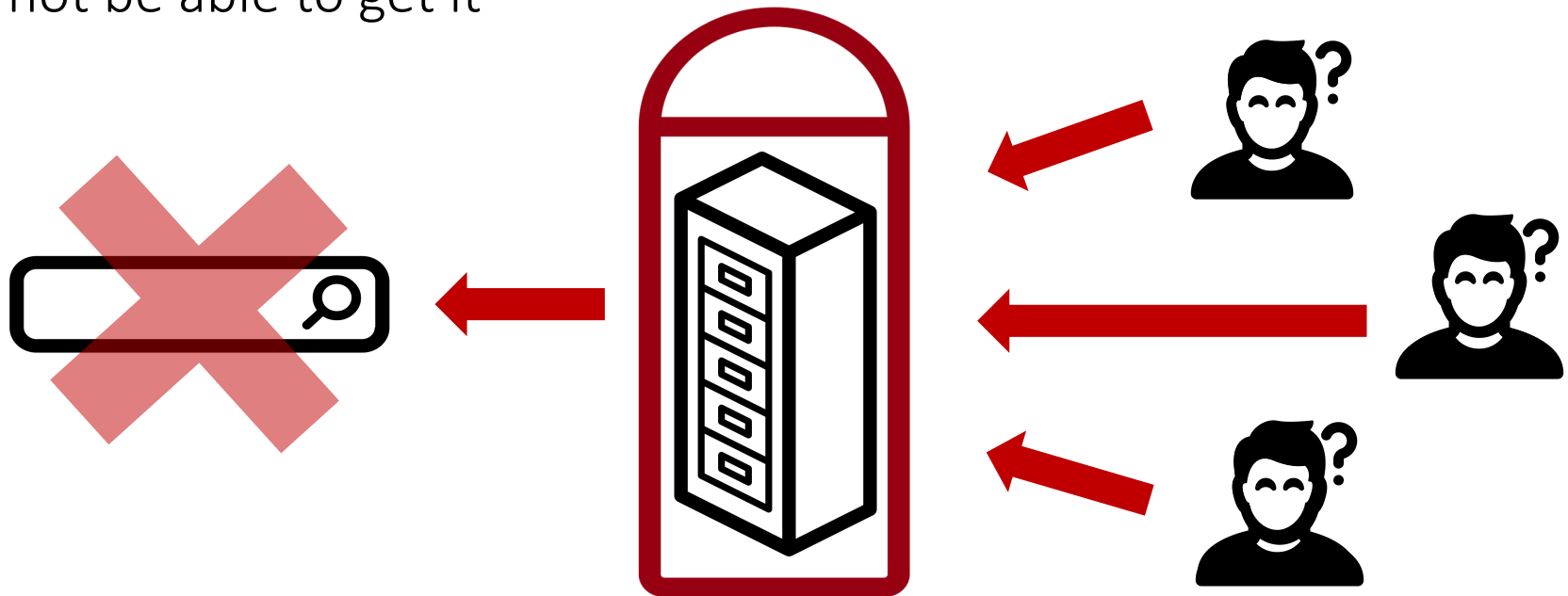**JPL Spark**

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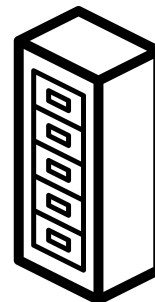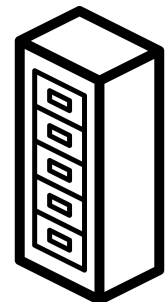
Summary of the Challenge

❖ "Siloization" makes unified search and retrieval nearly impossible without search engine optimization (SEO)

❖ Individual user permissions: the JPLer that needs access may not be able to get it

Tools of the Trade

❖ **Metadata**
Descriptive labels and common language mapping

❖ **Controlled vocabulary / Taxonomy**
Digital dictionaries that systems and users can understand when storing and looking for content
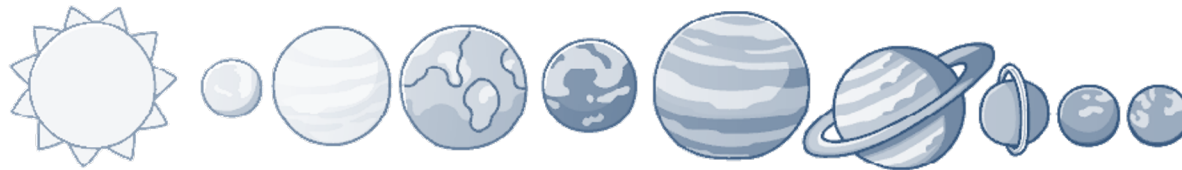
Example: Metadata and Taxonomy

JPL Taxonomy

❖ Foundational effort towards a common language

❖ Effort began in early 2000s; revived in 2015

❖ Currently hosted in PoolParty, with applications for TechConnect and JPL Space Search
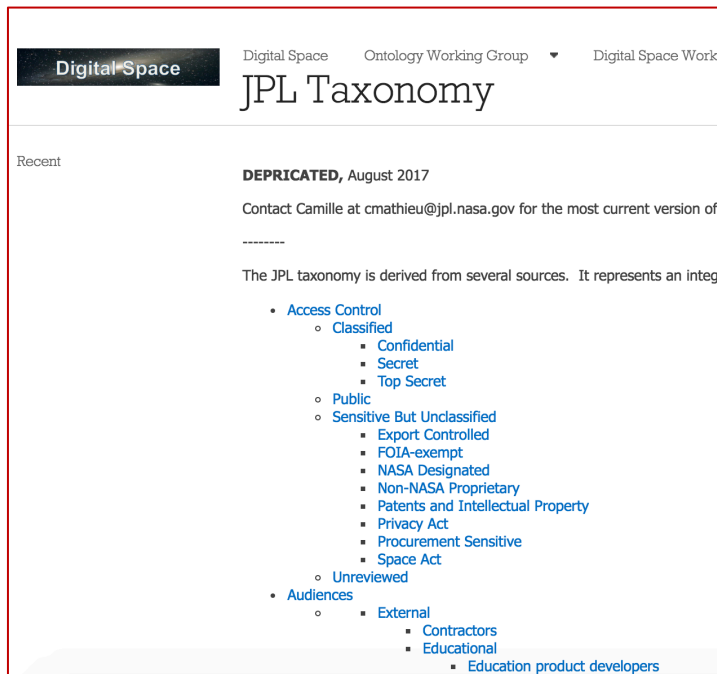
**Current efforts using
Taxonomy & Mapped Metadata:**

Vision: Taxonomy + Metadata at JPL

Taxonomy & Mapped Metadata

Common Language for JPL Information

JPL Effort: Wired

- ❖ JPL's Wikipedia
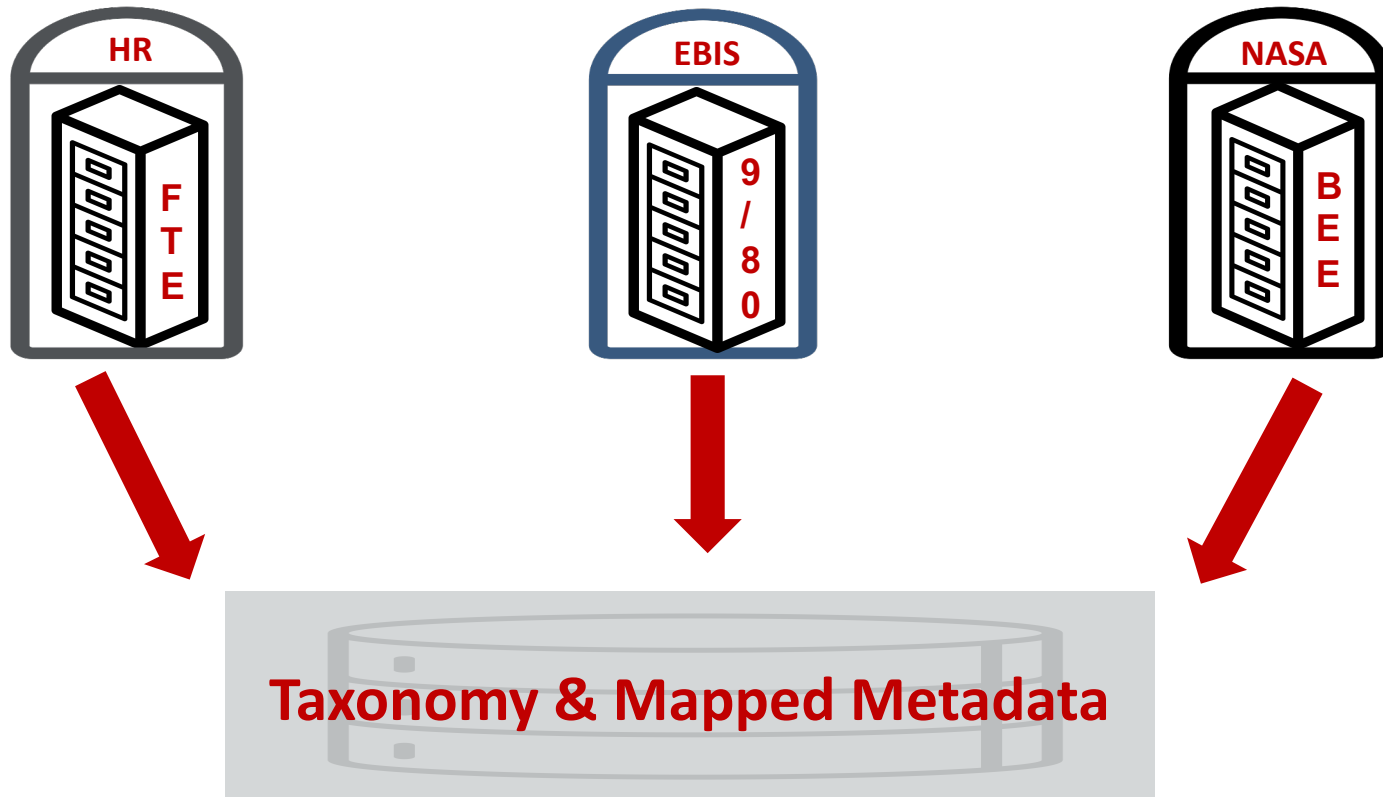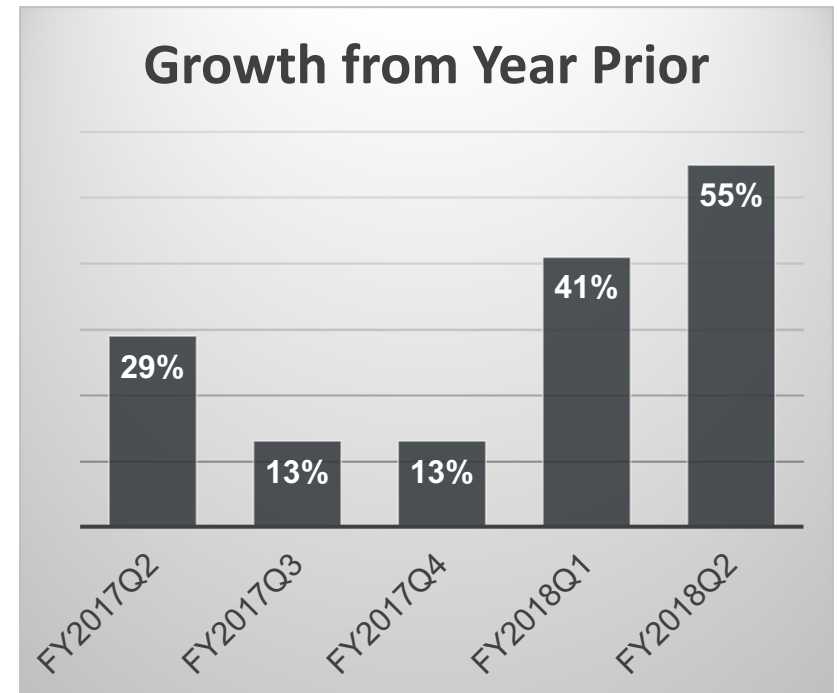
- ❖ In conjunction with **Digital Transformation** and **3x** partners

- ❖ Supports building Communities of Practice (though not accessible to Foreign Nationals)

- ❖ Wired organization is leveraged for JPL Taxonomy

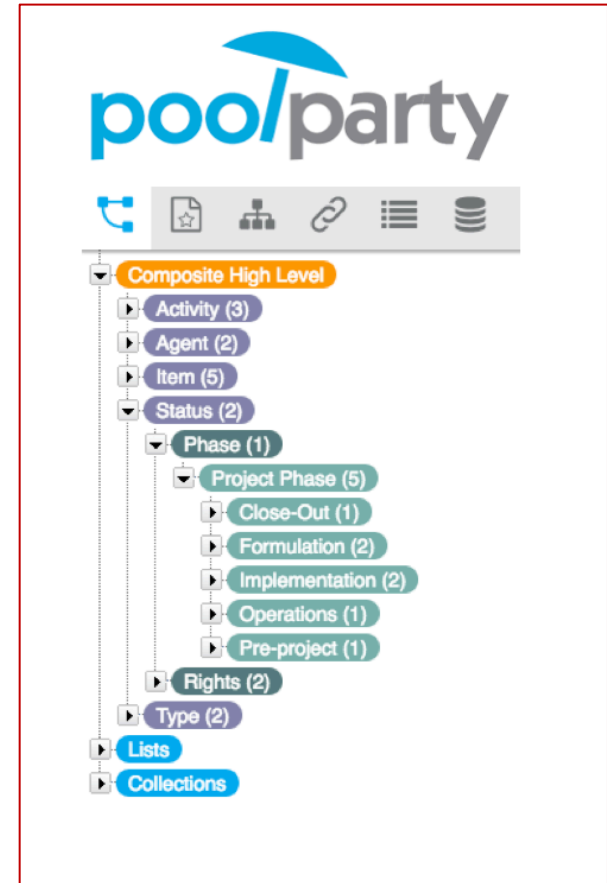- ❖ Since beginning library-curated Wired efforts, Wired content has grown

Growth from Year Prior

FY2017Q2	FY2017Q3	FY2017Q4	FY2018Q1	FY2018Q2
29%	13%	13%	41%	55%

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JPL Effort: Search Curation

❖ Partnership between JPL **Library** (2x) and **OCIO** (1x) to improve JPL Search

❖ As "silos" are indexed into JPL Space Search, metadata mappings can be established

❖ Implementation of the **Information Access Policy (DocID 78895)** should make finding relevant information less difficult for individual users
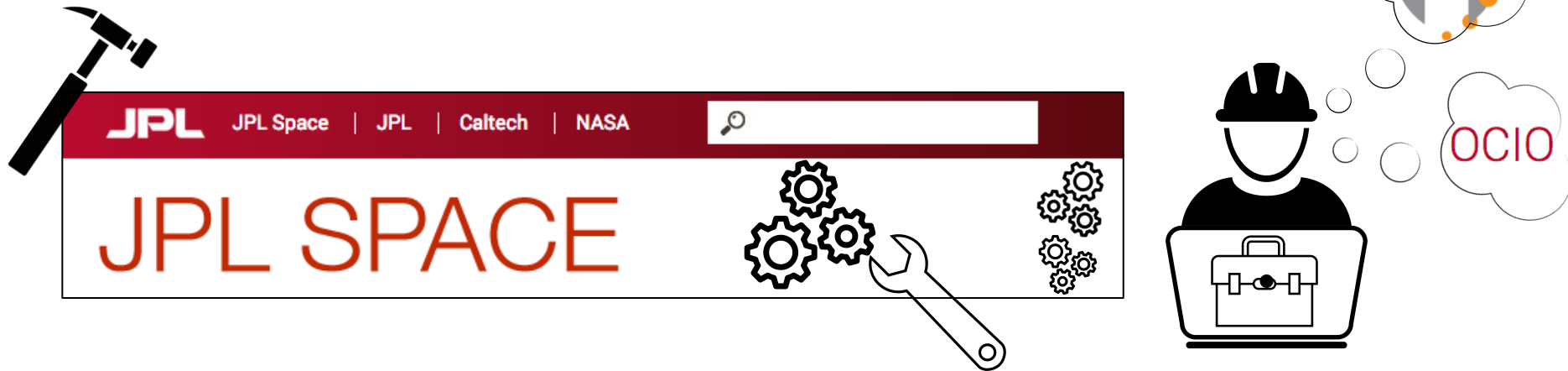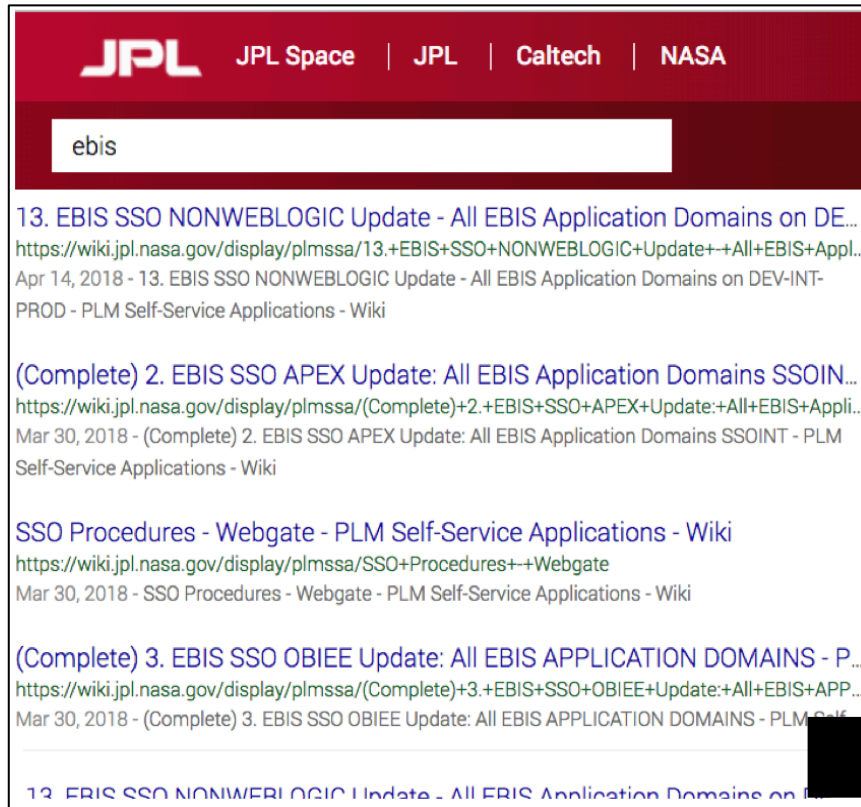
JPL Effort: Ontology Development

❖ **Ontology**
   Non-hierarchical relationships between concepts; built on metadata and taxonomy

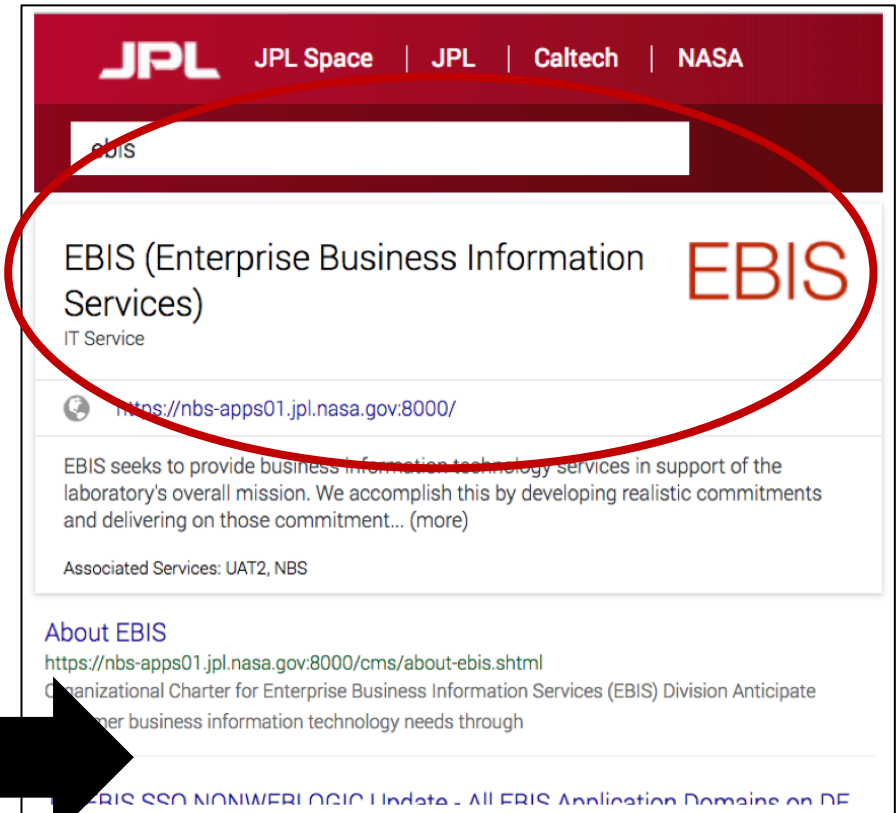❖ Work done by the **Ontology Working Group** (1x, 2x, 3x) will provide "best guess" and predictive results to users

JPL JPL Space

Q: When was GRACE-FO launched?

hasLaunchDate

project:GRACE-FO ───────▶ date:22May2018

A: GRACE Follow-On mission was launched May 22, 2018.

poolparty

Composite High Level
▸ Activity (3)
▸ Agent (2)
▸ Item (5)
▾ Status (2)
   ▾ Phase (1)
      ▾ Project Phase (5)
         ▸ Close-Out (1)
         ▸ Formulation (2)
         ▸ Implementation (2)
         ▸ Operations (1)
         ▸ Pre-project (1)
▸ Rights (2)
▸ Type (2)
▸ Lists
▸ Collections

Taxonomy + Metadata = SEO

BEFORE CURATION

AFTER CURATION

The Workplace of 2025

"In ten years' time, our physical workplaces may look much the same, but *our ability to access and benefit from information will make us orders of magnitude more powerful and productive*."

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How do we foster an effective information ecosystem?

- ❖ Break down silos with metadata/taxonomy
- ❖ Inspire high confidence with manual search curation and search engine optimization
- ❖ Partnering people with technologies – Digital Transformation
- ❖ Emphasizing ***how we do it*** alongside ***what we do***